

EARLY AQUINAS ON MATTER

NOTES ON THE RECEPTION OF THE ARISTOTELIAN
CORPUS IN THE 13TH CENTURY

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Abstract

In his commentary on the second book of Peter Lombard's *Sentences*, Aquinas deals with matter from different viewpoints. In this paper, some relevant texts from his Commentary on the distinctions 3, 12, and 18 are analyzed with a threefold aim. First, early Aquinas' doctrine of matter is illustrated, with particular attention to its physical and metaphysical implications. Second, Aquinas' theses are traced back to his Peripatetic sources, in order to show the crucial role played by Avicenna and Averroes in his rethinking of Aristotelian physics and metaphysics. Third, Aquinas' thought is put into the context of the debate on matter arisen since the reception of Latin Aristotle's *Physics* and *Metaphysics*. From these threefold perspective, the consistency and originality of early Aquinas' doctrine can be appreciated.

Key words: matter, Aquinas, Latin Aristotle, physics, metaphysics.

Resumen

En su comentario al Segundo libro de las *Sentencias* de Pedro Lombardo, Tomás de Aquino enfrenta el problema de la materia desde distintos puntos de vista. En este artículo, algunos textos relevantes del Comentario sobre las distinciones 3, 12 y 18 son analizados con un triple propósito. En primer lugar, se presenta

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la perspectiva temprana de Tomás de Aquino sobre la materia, con particular atención a sus implicaciones físicas y metafísicas. En segundo lugar, las tesis del Aquinate son rastreadas hasta sus raíces peripatéticas, con la finalidad de mostrar el papel crucial que juegan Avicena y Averroes en su replanteamiento de la física y metafísica aristotélicas. En tercer lugar, el pensamiento de Tomás de Aquino es puesto en el contexto del debate sobre la materia que surgió desde la recepción de la *Física* y la *Metafísica* del Aristóteles latino. Desde esta triple perspectiva, se puede apreciar la consistencia y originalidad de la propuesta temprana de Tomás de Aquino sobre la materia.

Palabras clave: materia, Tomás de Aquino, Aristóteles latino, física, metafísica.

Although his approach to the topic is never strictly monographic, in his earlier writings Aquinas deals with matter more than once, and in quite different contexts: not only in his first *opuscula* —especially in *De principiis naturae*—, but also in his commentary on Peter Lombard's *Sentences*. It is a selection of these passages that I intend to review here, and this with a threefold aim. First, I intend to make some doctrinal points concerning the way in which Aquinas conceives of matter. Second, I would like to look at some of Aquinas' major sources in order to highlight the extent to which his understanding of matter is grounded in the thought of Aristotle, Avicenna, and Averroes respectively. This will also provide scope for some historical remarks about the assimilation of Aristotle's *Physics* and *Metaphysics* in the Latin West. Third, I would like to put Aquinas' discourse in an extra-Thomistic context, in order to suggest that it cannot be fully appreciated irrespective of both some theological works of his time, and the first Latin commentaries on Aristotle's *Physics* and *Metaphysics*.

My paper is divided into three parts. After an outline of 13th-century doctrines of matter (§1) and some brief remarks about the doctrine of matter in *De principiis naturae* (§2.1), I shall focus on four early texts of Aquinas (§2.2). My analysis will concern both their contents and sources. By this means, I hope to shed light on some of early Aquinas' philosophical options as well as some nuances of his early metaphysics, and this to offer a corrective to the common scholarly tendency to

overlook development in his thought. Finally, I will reassess the way in which Aquinas stands in relation to his Arabic sources and to his contemporaries concerning the question of matter (§3).

1. THE DEBATE ON MATTER AROUND THE MID-13TH CENTURY

1.1 In her book on Albert the Great's doctrine of matter, Anna Rodolfi describes the topic of matter as "a transitional topic", on which the interests of both theologians and philosophers converge with increasing frequency¹. In fact, as exegetes respectively of Genesis² and of the Aristotelian corpus, both theologians and philosophers were supposed to approach the issue of matter from an inside perspective. What is more, intersections between the two fields became less and less rare. Indeed, if the recourse to the tools of philosophy is not uncommon among theologians in exegetical writings, it is mostly in philosophical works that theological concerns emerge, as philosophers attempted to make Aristotle theologically orthodox as well as philosophically consistent.

In the first half of the 13th century, the issue of matter is taken up in various kinds of texts. First among these is hexaemeral literature. A well-known example is Grosseteste's *Hexaëmeron*, composed in the first half of the 1230s, at about the time when he was also collecting his notes on Aristotle's *Physics*³. Yet, despite the presence of some philosophical cues, in this work the topic is not systematically problematized, since the author's focus remains strictly exegetical⁴.

¹ Anna RODOLFI: *Il concetto di materia nell'opera di Alberto Magno*, Firenze: Edizioni del Galluzzo 2004, p. xiv.

² Genesis 1, 1-2, is commonly taken as describing the creation by God of "formless and empty" matter.

³ Robert GROSSETESTE: *Hexaëmeron*, eds. Richard C. Dales, Servus Gieben, London: The British Academy (OUP) 1982, pp. xii-xiv. On Grosseteste's commentary on Aristotle's *Physics*, see Neil LEWIS: "Robert Grosseteste's *Notes on the Physics*", in *Editing Robert Grosseteste*, eds. Evelyn A. Mackie, Joseph Goering, Toronto: University of Toronto Press 2003, pp. 103-134.

⁴ Robert GROSSETESTE: *Hexaëmeron*, pp. xix-xxv. See also Richard C. DALES: "The Influence of Grosseteste's *Hexaëmeron* on the *Sentences* Commentaries of Richard Fishacre O.P. and Richard Rufus of Cornwall, O.F.M.", *Viator: Medieval and Renaissance Studies*, II (1971), pp. 271-300; Neil LEWIS: "Robert Grosseteste and the Church Fathers, in *The Reception of the Church Fathers in the West*",

Something different emerges from the commentaries on the *Sentences* of the 1230s and 1240s. In fact, Peter Lombard not only hints at matter and the (im)materiality of creatures in different contexts of Book II of the *Sentences*⁵, but he devotes distinctions 12-15 entirely to the Genesis account of creation. While the brief questions on matter drawn from the tradition of Alexander of Hales' *Glossa*⁶ are in all likelihood spurious⁷, in Albert's commentary the issue is sometimes approached philosophically. Still, Albert's interest in this topic is markedly different from Aquinas'. For instance, unlike Aquinas, when commenting on the first part of Book II of the *Sentences*, Albert raises no questions specifically dealing with celestial matter⁸.

Another relevant literary genre is that of theological *summae*⁹. Once again, Albert is of considerable interest¹⁰. In fact, by contrast with his commentary on *Sentences*, in the first part of his *Summa de creaturis* — where he is supposed to approach the question of coevals and their

ed. Irena Backus, Leiden: Brill 1997, vol. I, pp. 197-229: 207-209; James McEvoy: *Robert Grosseteste*, New York: OUP 2000, pp. 106-110.

⁵ See for example Peter LOMBARD: *Sententiae in IV libris distinctae*, ed. Ignatius Brady, Grottaferrata: Ed. Collegii sancti Bonaventurae ad Claras Aquas 1971: vol. I, l. II, d. 2, c. 5; d. 3, c. 1, §2. On Peter's doctrine of creation, see Marcia L. COLISH: *Peter Lombard*, Leiden: Brill, 1994, vol. I, p. 303-342.

⁶ See for example Alexander of HALES: *Glossa in quatuor libros Sententiarum Petri Lombardi*, eds. Quaracchi, Florence: Ex typographia collegii sancti Bonaventurae 1952, l. II, d. 12.

⁷ *Ibid.*, p. 128*.

⁸ Albert THE GREAT: *Commentarii in II Sententiarum*, ed. Augustus Borgnet, Paris: Vivès 1894 (*Opera omnia*, t. 27), d. 1, a. 3, 4, 11; d. 2, a. 2; d. 3, a. 4; d. 12, a. 1, 2; d. 18, a. 7.

⁹ Despite their structural differences, to this category also belong William of Auxerre's *Summa Aurea* (l. II, tr. 8), William of Auvergne's *Magisterium divinale et sapientiale* (especially *De universo*, ch. 29-34), and the *Summa Fratris Alexandri* (l. II, inq. 3).

¹⁰ On the chronology of Albert's early works, see Caterina Rigo: "Zur Redaktionsfrage der Frühschriften des Albertus Magnus", in *Albertus Magnus und die Anfänge der Aristoteles-Rezeption im lateinischen Mittelalter. Von Richardus Rufus bis zu Franciscus Mayronis*, eds. Ludger Honnefelder, Rega Wood, Mechthild Dreyer, Marc-Aeilko Aris, Münster: Aschendorff Verlag 2005, pp. 325-374.

origin from a mainly theological and exegetical perspective¹¹, Albert broadens his scope: he engages in some strictly philosophical questions, altogether comparable to the ones put forward by commentators on Aristotle. Such is the case in his treatments of matter¹². He first discusses its existence and essence (a. 1-2), then its origin (a. 3) and ontological structure (a. 4). Furthermore, he is concerned with an extensional issue, namely whether all creatures, *qua* created, are material (a. 5). Finally, he focuses on the intention of matter, in order to establish how many kinds of (first) matter there are (a. 6-8) — a question on which he will expand later on, when dealing specifically with the third coeval¹³.

Concerning the philosophical production, two literary genres are involved. In fact, questions on matter are raised both in commentaries on Aristotle — such as Rufus', Roger Bacon's, and Adam of Buckfield's —, and in autonomous treatises — for instance Robert Kilwardby's *De Ortu*

¹¹ Cf. RODOLFI: *Il concetto ...*, p. xix, 165.

¹² Albert THE GREAT: *Summa de creaturis (Prima pars)*, ed. Augustus Borgnet, Paris: Vivès 1895 (Opera omnia, t. 34), tr. 1, q. 2. On these passages, cf. RODOLFI: *Il concetto ...*, *passim*. Concerning Albert the Great's doctrine of matter, see Paul HOSSFELD: ">Erste Materie< oder >Materie im allgemeinen< in den Werken des Albertus Magnus", in *Albertus Magnus Doctor Universalis (1280/1980)*, eds. Gerbert Meyer, Albert Zimmermann, Mainz: Matthias-Grünwald-Verlag 1980, pp. 205-234.

¹³ Albert THE GREAT: *Summa de creaturis*, tr. 3, q. 7. On this text see Anna RODOLFI: "La dottrina della materia celeste in Alberto Magno", *Medioevo e Rinascimento*, XVII (2003), pp. 25-47: 28-35.

scientiarum (around 1250)¹⁴, whose interests¹⁵ turn out to be quite similar to Albert's in the *Summa creaturis*.

About the earlier commentary tradition, a few preliminary remarks are required, mainly concerning the number and sections of commentaries at stake. To begin, some key Aristotelian *loci* dealing with matter must be identified. It so happens that the interests of earlier commentators are particularly aroused by the last three chapters of *Physics* I (specifically dealing with the issue of motion, then of matter as the principle of physical change), by *Metaphysics* I, 8 (where Aristotle addresses Empedocles and Anaxagoras on the subject of material principles), and by *Metaphysics* II, 1-2 (on the finitude of causal chains)¹⁶. Still, the (surviving) commentaries on these sections of Aristotle's corpus dating to the first half of the 13th century are actually very few and their literary format is not uniform. What is more, virtually none of them is critically edited, some are not even accessible in printed edition¹⁷.

¹⁴ Robert KILWARDBY: *De ortu scientiarum*, ed. Albert G. Judy, Toronto: The Pontifical Institute of Medieval Studies 1976, pp. xiv-xvii. Judy describes this work as a witness of "the first era of fully fledged Aristotelianism in the Arts Faculty, a time when masters were able to draw upon the complete corpus of natural philosophy and metaphysics with a confidence and understanding that reveals a thorough familiarity with the formerly prohibited works" by Aristotle (*ibid.*, p. xvi-xvii). For a different opinion, see Gerhard LEIBOLD: "Robert Kilwardby's Commentary on the *Sentences* of Peter Lombard", in *Mediaeval Commentaries on the Sentences of Peter Lombard. Vol. 2*, ed. Philipp W. Rosemann, Leiden-Boston: Brill 2010, pp. 175-225: 175. For a doctrinal reading of this text, cf. Silvia DONATI: "Robert Kilwardby on Matter", in *A Companion to the Philosophy of Robert Kilwardby*, eds. Heinrich Lagerlund, Paul Thom, Leiden: Brill 2012, pp. 239-273.

¹⁵ Robert KILWARDBY: *De Ortu Scientiarum*, §§241-242, 245-248, 254, 257-261.

¹⁶ From the outset of his career, Aquinas is particularly interested in these books of the Aristotelian corpus and knows them very well: suffice it to look at his *De principiis naturae*, or at nearly 30 quotations from these books figuring in the first half of his Commentary on Book II of the *Sentences*.

¹⁷ See Amos BERTOLACCI: "The Reception of Averroes' *Long Commentary on the Metaphysics* in Latin Medieval Philosophy until Albertus Magnus", in *Via Alberti. Texte-Quellen-Interpretationen*, eds. Ludger Honnefelder, Hannes Möhle, Susana Bullido del Barrio, Münster: Aschendorff Verlag 2009, pp. 457-480; Francesco DEL PUNTA, Silvia DONATI, Cecilia TRIFOGLI: "Commentaries on Aristotle's *Physics* in Britain, ca. 1250-1270", in *Aristotle in Britain during the*

However, thanks to some remarkable developments in scholarship, a few important theses on matter circulating in the faculties of arts at both Paris and Oxford before and around the 1250s can be described.

1.2 With what follows, the example of Roger Bacon will serve to provide a sense of the debate taking place at the time. In his series of Parisian questions¹⁸ on *Physics* I and *Metaphysics* I-II¹⁹, dating to

Middle Ages, ed. John Marenbon, Turnhout: Brepols 1996, pp. 265-283; IDEM: "Les commentaires anglais sur la *Physique* d'Aristote au XIII^e siècle", in *L'enseignement des disciplines à la Faculté des arts (Paris et Oxford, XIII^e-XV^e siècle)*, eds. Olga Weijers, Louis Holtz, Turnhout: Brepols 1997, pp. 271-279; Silvia DONATI: "Per lo studio dei commenti alla *Fisica* del XIII secolo. I: Commenti di probabile origine inglese degli anni 1250-1270 ca.", *Documenti e studi sulla tradizione filosofica medievale*, II.2 (1991), pp. 361-441; *ibid.*, IV (1993), pp. 25-133; EADEM: "Il commento alla *Fisica* di Adamo di Bocfeld e un commento anonimo della sua scuola", *Documenti e studi sulla tradizione filosofica medievale*, IX (1998), pp. 111-178; *ibid.*, X (1999), pp. 233-297; EADEM: "The Anonymous Commentary on the *Physics* in Erfurt, Cod. Amplon. Q. 312 and Richard Rufus of Cornwall", *Recherches de Théologie et Philosophie médiévale* LXXII (2005), pp. 232-262; Rega Wood: "The Works of Richard Rufus of Cornwall: the State of the Question in 2009", *Recherches de Théologie et Philosophie médiévales*, LXXVI.1 (2009), pp. 1-73; Albert ZIMMERMANN: *Verzeichnis ungedruckter Kommentare zur Metaphysik und Physik des Aristoteles aus der Zeit von etwa 1250-1350*, Leiden-Köln: Brill 1971; IDEM: *Ontologie oder Metaphysik? Die Diskussion über den Gegenstand der Metaphysik im 13. und 14. Jahrhundert. Texte und Untersuchungen*, Leuven: Peeters 1998.

¹⁸ Roger BACON: *Questiones supra libros quatuor Physicorum Aristotelis*, Oxford: Clarendon Press 1928 (Opera hactenus inedita Rogeri Baconi [= OHI], t. 8); IDEM: *Questiones supra libros prime philosophie Aristotelis (Metaphysica I, II, V-X)*, ed. Robert Steele (with Ferdinand Delorme), Oxford: Clarendon Press 1930 (OHI, t. 10); IDEM: *Questiones altere supra libros prime philosophie Aristotelis (Metaphysica I-IV)*, ed. Robert Steele (with Ferdinand Delorme), Oxford: Clarendon Press 1932 (OHI, t. 11), pp. 1-170; IDEM: *Questiones supra libros octo Physicorum Aristotelis*, ed. Ferdinand Delorme (with Robert Steele), Oxford: Clarendon Press 1935 (OHI, t. 13). Note that, on philological, stylistic, and doctrinal bases, Silvia Donati have recently questioned the paternity of two of these works: Silvia DONATI: "Pseudoepigrapha in the *Opera hactenus inedita Rogeri Baconi*? The Commentaries on the *Physics* and on the *Metaphysics*", in *Les débuts de l'enseignement universitaire à Paris*, eds. Jacques Verger, Olga Weijers, Turnhout: Brepols 2013, pp. 147-197.

¹⁹ As for other readers of the *Metaphysics*, also for Bacon to book II of *Metaphysics* belong not only the three chapters of α , but also the chapters from 5 onwards of A, while the first book of *Metaphysics* is ultimately reduced to A,

the 1240s, matter is a recurrent topic, which Bacon approaches from several different perspectives. He dwells upon the ontological and epistemological status of (prime) matter, its origin (whether it was created by God at the very beginning of the world and how it was featured), its relationship to privation, form, being and non-being, potency, act, and corporeity. Moreover, Bacon asks what creatures are made out of matter, namely whether even spiritual beings are material, and he raises questions concerning prime matter, in order to establish whether all material beings – both celestial and sublunary bodies – are made out of the same kind of matter.

An in-depth doctrinal examination of these questions would be foreign to the purposes of the present discussion, so we will set for ourselves the more modest task of pinpointing some of Bacon's major theses. We shall proceed with the help of an accurate and insightful paper by Silvia Donati²⁰, which provides a clear outline of the 13th-century debate on matter. Donati focuses on the English commentary tradition of Aristotle's *Physics* and singles out, among others, four of their key features. First, a strong tendency to go far beyond Aristotle; second, a weak dependency on Averroes' interpretation of Aristotle – despite a strong dependency on his paraphrases of Aristotle's *littera* –, due perhaps to a still superficial level of knowledge of the Commentator's

1-2. On the division into books of Aristotle's *Metaphysics* and their succession, see Marta BORG: "Latin Medieval Translations of Aristotle's *Metaphysics*", in *A Companion to the Latin Medieval Commentaries on Aristotle's Metaphysics*, eds. Gabriele Galluzzo, Fabrizio Amerini, Leiden: Brill, 2013, pp. 19-58; Alain DE LIBERA: "Structure du corpus scolaire de la métaphysique dans la première moitié du XIII^e siècle", in *L'enseignement de la philosophie au XIII^e siècle. Autour du "Guide de l'étudiant" du ms. Ripoll 109*, eds. Claude Lafleur, Joanne Carrier, Turnhout: Brepols 1997, pp. 61-88, esp. 68-75; Olivier BOULNOIS: "Le besoin de métaphysique. Théologie et structures des métaphysiques médiévales", in *La servante et la consolatrice*, eds. Jean-Luc Solère, Zenon Kaluza, Paris: Vrin 2002, pp. 45-94, esp. 53-56.

²⁰ Silvia DONATI: "La discussione sulla materia nella tradizione di Commento della Fisica: commentatori inglesi degli anni 1240-1270 ca", in *Il commento filosofico nell'Occidente latino (secoli XIII-XIV)*, eds. Gianfranco Fioravanti, Claudio Leonardi, Stefano Perfetti, Turnhout: Brepols 2002, pp. 185-232.

thought (e.g., of his doctrine of the immateriality of celestial bodies)²¹; third, some acquaintance with certain of Avicenna's doctrines (e.g. on corporeity, understood in a realist sense); finally, a marked taste for ontological pluralism. In this picture, Roger Bacon plays a major role. In fact, very well representative of his time's doctrinal tendencies²², he raises several questions bound to become crucially important in late 13th-century philosophical debates, and elaborates very successful solutions to them. Three in particular are worth mentioning, none of which is Aristotelian, and all of which are to some extent inspired by Augustine and Avicenna. (i) Bacon supports universalhylomorphism. According to him not only sublunary and celestial beings, but also spiritual creatures are made out of matter²³. Within this framework, the notion of matter has less of a physical than of a metaphysical connotation. Materiality amounts to a constitutive ontological feature distinctive of all creatures with respect to God the Creator. Despite existing in beings of different sorts, the essence of matter (i.e. being pure potentiality)

²¹ On Averroes' exegetical role in the earlier Latin reception of Aristotle and the anti-Averroism of the earlier commentators, see DEL PUNTA, DONATI, TRIFOGLI: "Commentaries on Aristotle's ...", p. 277; IDEM: "Les commentaires ...", p. 279; Cecilia TRIFOGLI: *Oxford Physics in the Thirteenth Century (ca. 1250-1270). Motion, Infinity, Place & Time*, Leiden: Brill 2000, pp. 271-273. Specifically on Bacon and Averroes, see Jeremiah HACKETT: "Roger Bacon and the Reception of Aristotle in the Thirteenth Century: An Introduction to His Criticism of Averroes", in *Albertus Magnus und die Anfänge...* already quoted n.10, pp. 219-247.

²² On Richard Rufus, see Elizabeth KARGER: "Richard Rufus's Account of Substantial Transmutation", *Medioevo*, XXVII (2002), pp. 165-190; EADEM: "Richard Rufus as a source for Albertus Magnus", in *Albertus Magnus und die Anfänge...*, pp. 425-453; Peter RAEDTS: *Richard Rufus of Cornwall and the Tradition of Oxford Theology*, New York: Oxford University Press 1987; Rega WOOD: "The Earliest Known Surviving Metaphysics Commentary", *Medieval Philosophy and Theology*, VII (1998), pp. 39-49; EADEM: "Richard Rufus: Physics at Paris before 1240", *Documenti e studi sulla tradizione filosofica medievale*, V (1994), pp. 87-127; EADEM: "Richard Rufus and Aristotle's *Physics*", *Franciscan Studies*, LII (1992), pp. 247-281. On Robert Kilwardby, see DONATI: "Robert Kilwardby ..."; José Filipe SILVA: "Robert Kilwardby", in *Stanford Encyclopedia of Philosophy* (plato.stanford.edu).

²³ DONATI: "La discussione sulla materia ...", pp. 207-218; EADEM: "Robert Kilwardby ...", pp. 244-245.

is the very same at any level of reality. (ii) Bacon draws a distinction between the concepts of physical and metaphysical matter. Indeed, he estimates that the proximate substrate of change is not prime matter, but some already-shaped-matter. To account for this, Bacon elaborates on the notion of an active potency of matter. At stake here is no longer the essence of matter, but one of its modes of existence. In his view, in fact, active potency is extrinsic to the essence of matter. And yet, it is a necessary feature of matter, making possible substantial change. In Bacon's view, the quasi-formal principle that endows prime matter with a still imperfect form is privation. To be precise, physical matter amounts to a compound of prime matter and some generic form, which is apt to direct substantial change, once activated, towards other, numerically different, specific forms²⁴. (iii) With respect to substantial form, Bacon is therefore a pluralist²⁵.

To conclude this section, let us mention Albert the Great, whose commentary on Aristotle's *Physics* dates to approximately the beginning of the 1250s. Despite his extraneousness to the arts' context²⁶, Albert's reading is somehow receptive to the aforementioned theses²⁷. In fact, although Albert rejects the doctrine of universal hylomorphism, he does not completely dismiss the notion of universal matter. Moreover, in order to explain physical change, he admits of an active power of matter; interestingly, he tends to consider matter as really inseparable from corporeity²⁸. Therefore, as will soon be clearer, Albert's position

²⁴ DONATI: "La discussione sulla materia ...", pp. 218-230; EADEM: "Robert Kilwardby ...", pp. 263-272. About the effective role of this theory in the different series of questions traditionally ascribed to Bacon, see also EADEM: "Pseudoepigrapha", pp. 169-181.

²⁵ DONATI: "La discussione sulla materia ...", pp. 229-230; EADEM: "Robert Kilwardby ...", pp. 271-272.

²⁶ See AMOS BERTOLACCI: "Albert the Great and the Preface of Avicenna's *Kitāb al Šifā'*", in *Avicenna and his Heritage*, eds. Jules Janssens, Daniel De Smet, Leuven: Leuven University Press 2002, pp. 131-152: 147-148.

²⁷ See for example ALBERT THE GREAT: *Physica*, ed. Paul Hossfeld, Köln: Aschendorff 1987 (Opera omnia, t. 4.1), l. I, tr. 3, ch. 11-13, 17.

²⁸ RODOLFI: *Il concetto di materia ...*, pp. 64-71, 98-99, 121-125.

must lie somewhere between that of the masters of the Faculty of Arts and that of Aquinas.

2. EARLY AQUINAS ON MATTER²⁹

2.1 Matter from a physical perspective. Aquinas deals with matter in the first two chapters of his *De principiis naturae*³⁰, where generation is at issue³¹. In this context his perspective is mainly physical³². In addition to some literal borrowings and doctrinal imprints from Averroes, in his background there are Avicenna and, of course, Aristotle³³.

²⁹ For an overview of Aquinas' doctrine of matter, see David P. LANG: "The Thomistic Doctrine of Prime Matter", *Laval théologique et philosophique*, LIV (1998), pp. 367-385. See also Jeffrey E. BROWER: "Matter, Form, and Individuation", in *The Oxford Handbook to Aquinas*, eds. Brian Davies, Eleonore Stump, New York: Oxford University Press 2012, pp. 85-102.

³⁰ On the first two chapters of *De principiis naturae*, see in particular John F. WIPPEL: *The Metaphysical Thought of Thomas Aquinas. From Finite Being to Uncreated Being*, Washington: The Catholic University of America Press 2000, pp. 296-299.

³¹ On the date and the aim of *De principiis naturae* [henceforth: DPN], see Hyacinthe F. DONDAINE: "Préface" in Thomas AQUINAS, *De principiis naturae ad fratrem Sylvestrum*, Roma: Editori di San Tommaso 1976 (Opera omnia, t. 43, pp. 1-47), pp. 5-6; Ruedi IMBACH, Adriano OLIVA: *La philosophie de Thomas d'Aquin*, Paris: Vrin 2009, pp. 35-37; Pasquale PORRO: *Tommaso d'Aquino. Un profilo storico-filosofico*, Bologna: Carrocci editore 2012, pp. 22-29; Jean-Pierre TORRELL: *Initiation à saint Thomas d'Aquin. Sa personne et son oeuvre*, Fribourg-Paris: Ed. Universitaires de Fribourg (CH)-Les Éditions du Cerf 2002², pp. 71-73.

³² Matter is considered from a rather metaphysical perspective also in Aquinas' *De ente et essentia*. See Thomas AQUINAS: *De ente et essentia*, ed. Hyacinthe F. Dondaine, Roma: Editori di San Tommaso 1976 (Opera omnia, t. 43, pp. 315-381), viz. pp. 370.4-10, 31-32; 376.23-33, 45-50.

³³ On DPN's sources, see John J. PAUSON: *Saint Thomas Aquinas. De principiis naturae. Introduction and Critical Text*, Fribourg-Louvain: Nauwelaerts 1950, esp. pp. 72-74; specifically on Aquinas' dependence on Avicenna's *Liber primus naturalium*, see Rollen E. HOUSER: "Avicenna and Aquinas's *De principiis naturae*, c. 1-3", *The Thomist*, LXXVI (2012)/4, pp. 577-610. Concerning Avicenna and Averroes on matter, see Catarina BELO: *Chance and Determinism in Avicenna and Averroes*, Leiden: Brill 2007, pp. 55-89, 159-167; Amos BERTOLACCI: "The Doctrine of Material and Formal Causality in the *Ilāhiyyāt* of Avicenna's *Kitāb al-Šifā'*", *Quaestio*, II (2002), pp. 125-154; Ahamad HASNAWI: "La Physique du *Šifā'*: aperçus sur sa structure et son contenu", in *Avicenna and his Heritage...*, pp.

Aquinas starts by drawing a distinction between two meanings of matter. Broadly speaking, matter is whatever is in potency with respect to either accidental or substantial being³⁴. Properly speaking, it is what is in potency with respect to substantial being only. Indeed, in itself matter has incomplete being³⁵ and it is given actual being by an extrinsic, supervenient principle: form. In other words, matter is a potential, completely unformed being³⁶. By drawing this distinction, Aquinas intends to set the proper notion of matter apart from that of subject. While matter is characterized by ontological incompleteness and existential dependence upon form, any subject possesses in itself complete being, so that it depends on nothing else as far as its subsistence is concerned. Therefore, subjects have some matter, but they are not bare matter.

Following Aristotle, Aquinas includes matter in its proper sense among the necessary conditions for generation and he tries to account for how it relates respectively to form and privation, since in his view these three principles are distinct from one another at least “secundum rationem³⁷”.

Concerning matter and privation, Aquinas remarks that, despite being the same in subject, they differ in definition. In fact, while matter exists in potency, privation is actually non-being, mere absence of form³⁸. Indeed, matter is inseparable from privation, in the very same way as man is from his capacity for laughing. Matter can never be without privation and, as a consequence, it permanently is —irrespective of whatever form actualizes it— in a privative condition with respect to any form non-instantiated in it³⁹. Still, matter is not privation *tout court*. In fact, taken by itself, it is not sufficient for generation and it is exactly

67-80; Arthur HYMAN: “Aristotle’s ‘first matter’ and Avicenna’s and Averroes’ ‘corporeal form’”, in *Essays in Medieval Jewish and Islamic Philosophy*, ed. Arthur Hyman, New York: Ktav Publishing House 1977, pp. 335-356; Olga LIZZINI: *Fluxus (fayḍ). Indagine sui fondamenti della metafisica e della fisica di Avicenna*, Bari: Edizioni di Pagina 2011, pp. 335-482.

³⁴ Thomas AQUINAS: *DPN*, p. 39.12-14.

³⁵ *Ibid.*, p. 39.31-32.

³⁶ *Ibid.*, p. 40.69.

³⁷ *Ibid.*, p. 41.54.

³⁸ *Ibid.*, p. 40.70.

³⁹ *Ibid.*, pp. 40.18-23, 41.109-119.

by virtue of privation that its potentiality can be oriented towards one form rather than another. What is more, by contrast with privation (but as with form), matter not only contributes to the coming-to-be of a certain being, but it is also a constitutive part of it.

With respect to the relationship matter bears to form, Aquinas claims that, in order for matter to exist, there must be some form inhering in it⁴⁰. This is the reason why prime matter (*hyle*) cannot subsist as such, but only as a concept obtained by abstraction from any form and privation. Being bare matter irreducible to any hylomorphic compound, it can be neither defined nor properly known⁴¹. Moreover, prime matter must be numerically one in all hylomorphic compounds —of which it is a metaphysical component—, since the lack of intrinsic determining features prevent it from multiplication⁴².

2.2 Matter from a theological perspective. Special interest in the topic of matter emerges from the first half of Aquinas' commentary on Book II of the *Sentences*⁴³, where the creation of immaterial and material being is at issue. There are at least three of the Lombard's passages which give him cause to delve into the question: chapter 1 of d. 3, on the immateriality of angels; chapter 5 of d. 12, on the creation of (first) matter; and chapter 5 of d. 18, concerning seminal reasons. In what follows, we will turn our attention to Aquinas' commentary on these distinctions, specifically to those articles in which the notion of matter enters into the picture.

2.2.1 In the first article of his commentary on Book II of the *Sentences*, d. 3, Aquinas focuses on the ontological structure of angels and determines that, though not simple, angels do not admit of hylomorphic composition. Aquinas' aim is primarily exegetical. Actually, it is Peter Lombard's claim that the angelic essence is simple, indivisible, and

⁴⁰ *Ibid.*

⁴¹ *Ibid.*, p. 41.74-81.

⁴² *Ibid.*, p. 41.98-108.

⁴³ For an historical introduction to this work, see Adriano OLIVA: *Les débuts de l'enseignement de Thomas d'Aquin et sa conception de la sacra doctrina, avec l'édition du prologue de son commentaire des Sentences*, Paris: Vrin 2006.

immaterial⁴⁴, that gives rise to this question concerning the kind of composition, if any, that characterizes separate substances. Nonetheless, Aquinas' concern is also philosophical and, more precisely, metaphysical. Let us see why this is the case.

Aquinas' solution can be divided into three parts. (i) He starts by raising the question of the (im)materiality of angels in very general terms. In fact, he wonders whether all creatures (including angels) are essentially material. Having answered in the negative, (ii) he moves on to demonstrate that angels are immaterial creatures. His proof is twofold. (ii-a) He first infers the immateriality of angels from their intellective nature, then (ii-b) from their incorporeity. Finally, (iii) he concludes by explaining what kind of compounds angels are. In what follows I will focus on the first two steps of Aquinas' reasoning, refraining from an extensive treatment of the third part of Aquinas' text, as it bears on the notion of matter only indirectly. By describing act-potency composition in angels, despite the absence of a hylomorphic one, Aquinas shows his refusal to identify matter with potency⁴⁵.

(i) In order to establish the possibility of immaterial creatures, Aquinas reviews three opinions about the relationship the notion of createdness bears to that of materiality. To begin, he mentions universal hylomorphism, which he describes as a thesis quite popular among his contemporaries⁴⁶ ultimately ascribing it to Avicbron⁴⁷. Although Aquinas does not make this point explicitly, this thesis implies that, insofar as they are created, angels are not only material beings, but also composed of the very same matter as any other either celestial or

⁴⁴ Peter LOMBARD: *Sententiae ...*, II, dist. 3, p. 341.19-21 (emphasis mine): "Et quatuor quidem angelis videntur esse attributa in initio substantiae suae, scilicet *essentia simplex*, id est *indivisibilis et immaterialis*; et discretio personalis".

⁴⁵ See PORRO: *Tommaso ...*, pp. 24, 40.

⁴⁶ See DONATI: *La materia ...*, pp. 209-218.

⁴⁷ Thomas AQUINAS: *Super libros Sententiarum* [henceforth: *SSLS*], II, ed. Pierre Mandonnet, Paris: Lethielleux 1929, d. 3, q. 1, a. 1, sol (p. 86): "Dicendum, quod circa hanc materiam tres sunt positiones. Quidam enim dicunt quod in omni substantia creata est materia, et quod omnium est materia una; et hujus positionis auctor videtur Avicbron, qui fecit librum *Fontis vitae*, quem multi sequuntur".

sublunary creature⁴⁸. According to Aquinas, in fact, Avicenna's thesis is based on a twofold presupposition: on the one hand, that matter is the distinctive feature of created beings *qua* created; on the other, that the matter out of which creatures are made is the same at any ontological level, in such a way that the notion of matter is not reducible to that of corporeity.

The second thesis Aquinas refers to is Avicenna's⁴⁹, according to whom creatures can be either material or immaterial, and matter is only

⁴⁸ On Ibn Gabirol's doctrine of matter, see Mariaenza BENEDETTO: "La dimensione fondante della realtà: la materia di Ibn Gabirol e Shem Tov ben Yosef ibn Falaquera", *Quaestio*, VII (2007), pp. 229-244. On the reception of this doctrine in the Latin, see EADEM (transl.): *Avicenna. La fonte della vita*, Milano: Bompiani 2007, pp. 141-197; Fernand BRUNNER: *Platonisme et aristotélisme. La critique d'Ibn Gabirol par saint Thomas d'Aquin*, Louvain: Publications Universitaires de Louvain 1965.

⁴⁹ Thomas AQUINAS: *SSLS* II, d. 3, q. 1, a. 1, sol (p. 86): "Secunda positio est quod materia non est in substantiis incorporeis, sed tamen est in omnibus corporibus, etiam una; et haec est positio Avicennae". Cf. for example AVICENNA LATINUS: *Liber de Philosophia prima sive scientia divina*, ed. Simone Van Riet, Louvain-Leiden: Peeters-Brill 1977-1980, vol. 1, tr. II, 1, p. 68.76-77; *ibid.*, tr. II, 2, p. 76.32-82.44. See however AVICENNA LATINUS: *Liber primus naturalium: tractatus primus de causis et principiis naturalium*, ed. Simone Van Riet, Louvain-Leiden: Peeters-Brill, 1992, tr. I, 35.1-36.31. It is likely that Aquinas draws inspiration for his outline from Averroes, cf. AVERROES: *In Metaph.*, Venice: Apud Iunctas 1562 [Frankfurt am Main: Minerva 1962] (Aristotelis Opera cum Averrois commentariis, t. 8), XI(I) c. 10 (296v aM- 297r aA; [emphasis mine]): "Et si omnia, que transmutantur, habent materiam [...], sed naturae materialium diversantur secundum modos naturae transmutationis, materia autem generabilium est in potentia, translatorum autem est in actu, cum translatum sit aliquod in actu, et ideo quod ex translatis fuerit non generabile neque corruptibile, non habebit materiam, quam habet generabile et corruptibile, et est quae est in potentia; et quasi dicat, et omnia aeterna quae sunt non generabilia, sed moventur motu secundum translationem, habent materiam, sed non habent materiam generabilium, materiam eorum, quae moventur de ubi in ubi. Et ex hoc videtur corpus coeleste non habere potentiam divisibilem secundum divisionem corporis, scilicet formam materialem [...] Avicenna autem erravit in hoc, cum dicit quod materia, quae est in potentia, existit in omnibus corporibus". It is noteworthy that in later texts, while ultimately maintaining his critical position towards Avicenna's doctrine of universal matter, on the one hand Aquinas will stop to mention Avicenna in contexts dealing with the unicity of prime matter and, on the other, will criticize more and more harshly Averroes' option. Cf. for example Thomas AQUINAS:

in sublunary and celestial corporeal substances; indeed, it is the very same in all of them. The implication of these premises —which, once again, Aquinas does not make explicit— is that in Avicenna’s cosmos only spiritual creatures are immaterial. Accordingly, material and corporeal are coextensive notions and both can be predicated univocally of celestial as well as sublunary substances. As it emerges from his subsequent remarks, Aquinas appears to think that Avicenna’s doctrine is, unlike Avicenna’s, theologically sound, yet philosophically weak. As a consequence, Aquinas could well be content with the Avicennian conclusion as far as angels’ ontological structure is concerned; his dissatisfaction is about the physical and cosmological implications of such a thesis.

The third opinion⁵⁰ Aquinas examines is traced back to Maimonides⁵¹ and Averroes⁵², who partially agree with Avicenna. With him they maintain that only corporeal beings are material and they exclude any kind of hylomorphic composition in angels. In other words, Aquinas thinks that, as does Avicenna, Maimonides and Averroes conceive of materiality and corporeity as necessarily linked to one another — certainly as coextensive, possibly even as intentionally equivalent. On the other hand, Aquinas recognizes that they disagree with Avicenna on the nature of bodies, since they consider celestial and elementary matters irreducible to one another. In other words, superlunary and sublunary

Summa Theologiae, I, q. 66, a. 2, sol; *In Metaph.* VIII, ed. Raymundus M. Spiazzi, Taurini-Romae: Marietti 1964, I, 4, nn. 1729-1730; *ibid.* XII, I, 2, n. 2436; *In de coelo et mundo*, ed. R. M. Spiazzi, Taurini-Romae: Marietti 1952, I, I, 6, nn. 62-63; *Summa contra Gentiles*, II, c. 16. On this debate, see DONATI: “La discussione sulla materia ...”, pp. 208-209.

⁵⁰ THOMAS AQUINAS: *SSLS* II, d. 3, q. 1, a. 1, sol (p. 86): “Tertia positio est quod corpora caelestia et elementa non communicant in materia: et haec est positio Averrois [...] et Rabby Moysis”.

⁵¹ MAIMONIDES: *The Guide of the Perplexed*, transl. Shlomo Pinès, Chicago: University of Chicago Press 1963, II.13 (pp. 284-285); II.19 (pp. 306-312); II.26 (p. 332).

⁵² Cf. AVERROES: *In Metaph.* VIII, c. 11; *ibid.* X, c. 12; *ibid.*, c. 26; *ibid.* XI(I), c. 10; IDEM: *Sermo de substantia orbis*, Venice: Apud Iunctas 1562 [Frankfurt am Main: Minerva 1962] (Aristotelis Opera cum Averrois commentariis, t. 9), ch. 2, *passim*; *ibid.*, ch. 5. Note that at this stage Aquinas passes over some implications of Averroes’ thesis, namely the lack of hylomorphic composition in celestial bodies. See below, p. 59.

beings do not possess bodies of the same type, but rather are equivocally bodies. Aquinas characterizes Maimonides' and Averroes' thesis as the one most genuinely Aristotelian⁵³, and for that reason adopts it.

(ii) Aquinas moves on to proving the immateriality of separate substances. (ii-a) The first argument he provides is not new: he infers the immateriality of angels from their intellectual nature⁵⁴. Appearing repeatedly in Aquinas' works⁵⁵, it derives from the thought of Averroes⁵⁶. Note that at this stage, Aquinas considers the notion of matter independently from that of body, as if he were still disposed

⁵³ Thomas AQUINAS: *SSLS* II, d. 3, q. 1, a. 1, sol (p. 86): "Et videtur magis dictis Aristotelis consonare; et ideo istam [positionem] eligimus quantum ad praesens pertinet, dicentes, quod quidquid sit de corporalibus, in angelis nullo modo potest esse materia".

⁵⁴ *Ibid.*: "Quod enim nullum intellectuale sit materiale, communiter a philosophis retinetur. Unde etiam ex immaterialitate divina ejus intellectum concludunt. Et ratio satis manifesta est, quia materia prima recipit formam, non in quantum est forma simpliciter, sed in quantum est intellecta nisi in potentia, quia cognitio est formae, in quantum est forma; et ideo, si intellectus aliquis poneretur habens materiam, forma existens in eo non esset haec: unde forma existens in materia non est intellecta in actu: et sic per formam illam non intelligeret. Hujus etiam signum est, quod forma materialis non efficitur intellectualis, nisi quia a conditionibus materiae abstrahitur; et sic efficitur perfectio intellectus proportionata sibi: unde oportet intellectum non materialem esse: et hoc non sequitur materiam ex parte alicujus formae, cum omnis forma per abstractionem a conditionibus materiae intelligibilis fiat; sed consequitur eam secundum se, et virtualiter, sive sit sub forma corporali sive spirituali".

⁵⁵ See for instance Thomas AQUINAS: *De Ente et essentia*, p. 375.1-376.33; *SSLS* I, d. 8, q. 5, a. 2, sol; *ibid.*, d. 35, q. 1, a. 1, sol. The argument is provided as evidence for respectively the immateriality of angels, soul and God. See also *SSLS* II, d. 1, q. 1, a. 1, sol (p. 13): "Tertia via est ex immaterialitate ipsius Dei: oportet enim causam moventem caelum esse virtutem non in materia, ut in VIII *Physicor.* [...] probatur [...]".

⁵⁶ AVERROES: *In Metaph. XI(I)*, c. 36, 318v G. See also IDEM: *Commentarium magnum in Aristotelis de anima libros*, ed. F. Stuart Crawford, Cambridge (Massachusetts): The Medieval Academy of America 1953, III, c. 4, 385.62-105. On this argument see Richard TAYLOR: "Averroes on Psychology and the Principles of Metaphysics", *Journal of the History of Philosophy*, XXXVI.4 (1998), pp. 507-523; AVERROES (IBN RUSHD OF CORDOBA): *Long Commentary on the De Anima of Aristotle*, transl. Richard Taylor (with Thérèse-Anne Druart), New Haven & London: Yale University Press 2009, pp. li-liiii.

to meet the supporters of universal hylomorphism halfway, and to evaluate the possibility of incorporeal material substances. However, proceeding from shared premises, Aquinas comes to refute their thesis by pointing out that no enmattered form, irrespective of its being corporeal or not, can perform any intellectual activity. (ii-b) The second argument, once again directed to the supporters of universal hylomorphism, disproves their thesis decisively. Here Aquinas rejects the only presupposition he had previously conceded them. Rather than on the notions of matter and intelligibility, Aquinas focuses here on that of corporeity. As do Avicenna, Averroes and Maimonides, he intends to show that it cannot be disjointed from the notion of matter. In fact, he deduces the immateriality of angels from their incorporeity —which he takes for granted—, showing that there is no material being which can be incorporeal⁵⁷. Let us reconstruct briefly the structure of Aquinas' reasoning, in which Avicennian and Averroian elements intermingle⁵⁸.

He moves from the assumption that there is a one-to-one correspondence between what is perfectible and its relative perfection. This is exactly the case of matter with respect to form. Being in itself indistinct, either conceptually or really, prime matter can be differentiated only by virtue of form. More precisely, being just one, prime matter cannot be differentiated otherwise than by one single form. Which one? Aquinas argues that this is the function of the form of corporeity. In fact —as he makes clear step by step—, for any diversity to obtain in matter, there must be a plurality of diverse parts. However, there can be

⁵⁷ Thomas AQUINAS: *SSLS* II, d. 3, q. 1, a. 1, sol (p. 86-87, emphasis mine): “Secundo incorporeitas repugnat materiae: cum enim uni perfectibili debeat una perfectio, et in materia prima non sit ulla diversitas, oportet quod omnis forma ante quam non potest in ea esse ulla diversitas, nec intelligi, investiat eam totam. Sed ante corporeitatem non potest intelligi aliqua diversitas quia diversitas praesupponit partes, quae non possunt esse nisi praeintelligatur divisibilitas quae consequitur quantitatem, quae sine corporeitate non est. Unde oportet quod *tota materia sit vestita forma corporeitatis*; et ideo si aliquid est incorporeum, oportet esse immateriale”. Concerning Aquinas on corporeality, see Carlos B. BAZÁN: “La corporalité selon saint Thomas d’Aquin”, *Revue philosophique de Louvain*, LXXXI-51 (1983), pp. 369-409; WIPPEL: *The Metaphysical Thought ...*, pp. 327-351.

⁵⁸ Cf. AVERROES: *In Physic.*, Venice: Apud Iunctas 1562 [Frankfurt am Main: Minerva 1962], I, c. 63 (esp. 38raB; 38vbD); AVICENNA LATINUS: *Philosophia prima...*, vol. I, tr. II, 3, p. 89.70-92.25. On this text by Aquinas, see WIPPEL: *The Metaphysical Thought ...*, pp. 355-357.

no parts in a whole apart from division and, ultimately, quantity. Hence, since the form of corporeity is a necessary condition for any quantitative and dimensional determinations, there can be quantity only in corporeal matter. Accordingly, there cannot be matter without corporeity, with the consequence that all and only sublunary and celestial bodies are material. Yet this is not the case with angels: being incorporeal, they are necessarily immaterial⁵⁹.

To conclude this section, let us try to situate the doctrine of matter emerging from a. 1 of Aquinas' commentary on Book II, d.3, of the *Sentences* with respect to that of *De principiis*. In a word, Aquinas definitely enlarges his scope at least from two points of view. First, on the basis of his Arabic sources he connects the notion of matter to that of corporeity, making them mutually dependent. Moreover, he excludes the possibility of matter being the distinctive feature of creatures, differentiating them from their Creator. Therefore, in this specific context Aquinas diverges substantially from the mainstream of the Arts Faculty⁶⁰.

⁵⁹ In the *SSLS* this argument has already been exploited by Aquinas, in his proof of the immateriality of soul: cf. Thomas AQUINAS: *SSLS* I, d. 8, q. 5, a. 2 (pp. 228-229, emphasis mine): "Et propterea *materia prima*, prout consideratur *nuda ab omni forma*, non habet aliquam diversitatem, sed efficitur diversa per aliqua accidentia ante adventum formae substantialis cum esse accidentale non praecedat substantiale. Uni autem perfectibili debetur una perfectio. Ergo oportet quod *prima forma substantialis* perficiat totam materiam. Sed prima forma quae recipitur in materia est *corporeitas*, a qua nunquam denudatur, ut dicit Commentator in I *Physic*. [text. com. 63]. Ergo *forma corporeitatis* est in tota materia, et ita materia non erit nisi in corporibus. Si enim diceret, quod quidditas substantiae esset *prima forma recepta in materia*, adhuc redibit in idem; quia ex quidditate substantiae materia non habet divisionem, sed ex corporeitate, quam consequuntur dimensiones quantitatis in actu; et postea per divisionem materiae, secundum quod disponitur diversis sitibus, acquiruntur in ipsa diversae formae [...]". On this argument, see WIPPEL: *The Metaphysical Thought ...*, pp. 347-368. For further evolution of this same argument, see Thomas AQUINAS: *Summa Theologiae*, I, q. 50, a. 2, sol. On these passages by Aquinas, see BAZÁN: "La corporalité ...", *passim*; WIPPEL: *The Metaphysical Thought ...*, pp. 347-357. It is quite helpful to read these texts in the light of the notion of body emerging from Thomas AQUINAS: *De ente et essentia*, pp. 371.105-372.150).

⁶⁰ At that time this thesis was also quite common among theologians in their discussions of angels.

2.2.2 Aquinas returns to the topic of matter in his commentary on d. 12 of Book II of Peter Lombard's *Sentences*. As he remarks in his *divisio textus*, from this distinction onwards Peter is concerned with the creation of corporeal nature. At stake is specifically the exegesis of the opening verses of Genesis, and particularly of the term "terra", qualified as "inanis et vacua". To what does it refer exactly? On the one hand, Peter seems to take it as standing for the four elements, ether excluded⁶¹. On the other, by the phrase "omnia corporalia" he seems to designate all things deriving from unformed matter, so as to leave open the question of celestial bodies⁶².

It is precisely on this undecided issue that Aquinas focuses at the beginning of his commentary on d. 12, by asking whether there is only one matter out of which all bodies are made —in exegetical terms: whether in the beginning also celestial bodies are derived from the same "formless and empty earth" as sublunary bodies⁶³. Unlike Peter's, Aquinas' approach to the topic is veritably philosophical, as is clear

⁶¹ Peter LOMBARD: *Sententiae ...*, II, d. 12, pp. 384.10-12; 385.16-17.

⁶² See Thomas AQUINAS: *SSLS* II, d. 12, q. 1, a. 1, arg. 2. Cf. also Peter LOMBARD: *Sententiae ...*, I, d. 2, which Aquinas seems to have in mind when commenting d. 12.

⁶³ The relevance of Aquinas' question becomes clearer if we take into account the whole of his commentary on d. 12, especially Thomas AQUINAS: *SSLS* II, d. 12, q. 1, a. 5 (p. 316-317): "Per opus creationis instituta est tota creatura quantum ad esse suum informe; unde quae non possunt duci ad unum informe principium, quod est materia, faciunt numerum in operibus creationis [...]. Similiter etiam corporum caelestium et inferiorum non est una materia; et ideo numeratur caelum, et materia quatuor elementorum". Cf. also BONAVENTURE: *Commentaria in quatuor libros Sententiarum*, eds. Quaracchi, Ad Claras Aquas: Ex typographia collegii S. Bonaventurae 1885, II, d. 12, *primum dubium* (pp. 306b-307a): "Dicendum, quod etsi multae sint expositiones huius verbi: *In principio creavit Deus caelum et terram*; quatuor tamen sunt principales, et secundum has differenter exponitur nomen *terrae* [...]. Quarta expositio, quae communior est secundum expositores et planior, est, quod per *caelum* intelligatur *caelum empyreum*, quod est Angelorum habitaculum, in quo Angeli sunt creati; per *terram* vero *materia omnium corporum* intra ipsum contentorum, sive caelestium sive terrestrium. Haec expositio sequenti litterae concordat, quae exprimit, de illa materia facta esse corpora caelestia et elementaria".

from the very terms in which he formulates his question⁶⁴. In keeping with the aforementioned text from d. 3, Aquinas rejects the possibility of reducing to one single kind of prime matter both sublunary and celestial beings. Once again, he takes as his starting point the juxtaposition of the Avicennian⁶⁵ and the Averroistic solutions⁶⁶; then he opts for the view of Averroes; once again, for exegetical reasons: because of his closer adherence to Aristotle⁶⁷. Let us consider his argument.

The first thesis Aquinas expounds is Avicenna's: all bodies share one only kind of matter. In Aquinas' view, Avicenna grounds his opinion on the notion of corporeity, considering it univocally applicable to all material beings insofar as they are material (and then, by virtue of that, they are bodies). This reconstruction by Aquinas calls for a couple of remarks. First, it is worth noting that, although what is at stake here is a notion already used in d. 3, i.e., that of corporeity, Aquinas assigns it a different role in this context. While in d. 3 he does not explicitly trace such a notion to Avicenna and refers to it in his own solution to the question raised, something different occurs here, where Aquinas sets this notion —now explicitly attributed to Avicenna— aside, as unsuited to his own point. Actually, this is not incoherent, since Aquinas' perspective changes: whereas in d. 3 he invokes corporeity against the

⁶⁴ On this passage, see Thomas LITT: *Les corps célestes dans l'univers de saint Thomas d'Aquin*, Louvain-Paris: Publications universitaires-Béatrice Nauwelaerts 1963, esp. pp. 59-62.

⁶⁵ Thomas AQUINAS: *SSLS* II, d. 12, q. 1, a. 1, sol (p. 302): "Dicendum, quod super hoc invenitur duplex philosophorum opinio, quarum utraque sectatores habet. Avicenna enim [...] videtur ponere unam materiam esse omnium corporum, argumentum ex ratione corporeitatis assumens, quae cum sit unius rationis, una sibi materia debetur". Note that, as before, Aquinas likely describes the alternative between the two options from an Averroian perspective. Indeed, unlike before, he introduces Averroes' viewpoint as specifically formulated against Avicenna.

⁶⁶ *Ibid.*: "Hanc autem positionem Commentator improbare intendit in princ. *Caeli et mundi* et in pluribus aliis locis".

⁶⁷ *Ibid.* (p. 303): "Et hoc videtur probabilius, et magis consonum dictis Philosophi". The argumentative structure of the parallel passage in *Summa Theologiae* (I, q. 66, a. 2, sol) will be quite different. In particular, the position here attributed to Avicenna will be there traced back to Avicenna. Moreover, also Averroes' option will be rejected there.

supporters of spiritual matter, in d. 12 he considers it in connection with the very notion of (corporeal) matter.

Secondly, it is interesting to draw attention to a few slight, but significant, terminological shifts between d. 3 and d. 12. While in the former Aquinas speaks of a “form of corporeity” and seems to give it something of an ontological relevance, in d. 12 this is no longer the case, at least not in the solution, where he refers rather to the *ratio corporeitatis* and seems to ascribe to Avicenna a weak account, so to say, of corporeity⁶⁸. In fact, Aquinas does not ultimately provide an unambiguous reading of Avicenna, with the result that it is unclear whether he considers Avicenna’s doctrine as implying a merely logical or even an ontological priority of corporeity with respect to further formal determinations. An ontological priority seems to be involved in the first argument of the article⁶⁹, but it is not traced to Avicenna.

The second thesis Aquinas considers is Averroes’, introducing it as a recurrent argument of the Commentator, and indeed as formulated expressly against Avicenna. Aquinas’ reasoning runs as follows⁷⁰. (i) First premise: since (sublunary) matter is in potency with respect to all (natural) forms and cannot be actualized by more than one simultaneously, matter is always in potency with respect to any form

⁶⁸ About Avicenna on corporeality, see Abraham D. STONE: “Simplicius and Avicenna on the Essential Corporeity of Material Substances”, in *Aspects of Avicenna*, ed. Robert Wisnowsky, Princeton: Markus Wiener Publishers 2001, pp. 73-130. Cf. also BERTOLACCI: “The Doctrine of Material ...”, p. 127, note 6.

⁶⁹ To be precise Aquinas speaks here of (prime) matter in general, without qualification. What he intends to prove, starting from the assumption that there is just one prime matter, is that such a matter cannot be common to all hylomorphic compounds, i.e. sublunary as well as celestial. Note that in considering celestial bodies as hylomorphic compounds, Aquinas actually ends up not following Averroes. Of course, the characterization of matter here is physical. Thomas AQUINAS: *SSLS II*, d. 12, q. 1, a. 1, arg. 1 (p. 301): “Quorumcumque enim est forma unius rationis, eorum est una materia communis, eo quod proprius actus in propria potentia fit, ut dicit Philosophus [...]. Sed forma corporeitatis est unius rationis in omnibus corporibus. Ergo videtur quod una materia sit superiorum et inferiorum corporum”.

⁷⁰ On this argument, see Steve BALDNER: “Thomas Aquinas on Celestial Matter”, *The Thomist*, LVIII.3 (2004), pp. 431-467: esp. 446.

not yet (or no longer) instantiated in it⁷¹. (ii) Second premise⁷²: there is a one-to-one correspondence between natural active and passive potencies. If this were not the case, some of them would necessarily remain unfulfilled. Therefore, the nonexistence of certain active potencies implies the same of their respective passive potencies. Turning his attention to celestial matter's passive potency, Aquinas considers whether there exists an active potency capable of actuating in a given celestial body's material substrate any new form (be it celestial or not). By contrast with sublunary bodies, with celestial ones, such is not the case. As a result, their constitutive matter cannot have the same passive potency as sublunary matter. In fact, since celestial bodies are incorruptible, their forms admit of no contrary and cannot be separated from their respective material substrates. Put another way, no chunk of celestial matter can be in potency with respect to any form (celestial nor sublunary), other than the one by which it is concretely actualized, and by means of which the celestial body turns out to be the specific kind of subsisting body it actually is. (iii) Conclusion: celestial matter cannot be reduced —as far as its essence is concerned— to sublunary matter, since the latter is in potency with respect to many forms (which it can take up and lose by undergoing natural processes of generation and corruption), while the former is not.

Unsatisfied with this direct proof of the irreducibility of celestial and sublunary matter, Aquinas provides two other arguments in its favor, both of which are structured as proofs by contradiction. (α) First⁷³, Aquinas implicitly responds to the following objection: while we acknowledge that, being in potency with respect to many forms, prime

⁷¹ Cf. Thomas AQUINAS: *Summa Theologiae*, ed. Leon., Romae: Ex typographia polyglotta 1889, I, q. 66, a. 2, sol., (t. 5, p. 157a): "Materia enim, secundum id quod est, est in potentia ad formam. Oportet ergo quod materia, secundum se considerata, sit in potentia ad formam omnium illorum quorum est materia communis. Per unam autem formam non fit in actu nisi quantum ad illam formam. Remanet ergo in potentia quantum ad omnes alias formas [...]".

⁷² This argument is often exploited by Averroes: cf. for example AVERROES: *Commentum magnum super libro de caelo et mundo*, eds. Francis J. Carmody (+), Rüdiger Arnzen, Leuven: Peeters 2003, I, c. 20 (vol. 1, pp. 38.71-39.84).

⁷³ On this argument, see BALDNER: "Thomas Aquinas ...", p. 446-447. Baldner takes this argument as an objection in favour of celestial bodies' hylomorphic composition, a thesis Aquinas has just rejected in his solution.

matter's potentiality cannot be exhausted by any sublunary substantial form inhering in it, this is not necessarily the case with celestial forms, because of their perfection⁷⁴. According to him, his previous argument can be proved true, even if the nobility of celestial forms is taken into account. Since, if actualized by just one (even celestial) form, the potentiality of the underlying matter would remain unfulfilled, that is, incompletely actualized, in so far as privation would remain a necessary concomitant of it. In fact, in order to bring prime sublunary matter to a complete actualization, any form —including the most perfect ones— would need instantiating in it together with all the other forms with respect to which such a prime matter is in potency⁷⁵. Still, this is impossible because of the natures both of celestial forms —which are incorruptible and thus irreplaceable by other forms—, and of sublunary prime matter, —which cannot be actualized simultaneously by multiple forms. Consequently, we must exclude the possibility that celestial and sublunary matter can be reduced to one and the same prime matter⁷⁶.

⁷⁴ This objection is intended to account for the impossibility of one celestial body's changing into another, without looking at their material substrate. Interestingly enough, this objection seems to arise from a thesis Aquinas himself shares: the form of celestial bodies is such that it exhausts in itself all the potentiality of matter apt to receive that specific form —which implies that celestial bodies belong to one-membered species. Cf. THOMAS AQUINAS: *SSLS* I, d. 19, q. 4, a. 2, sol. Note that, unlike Albert the Great, Aquinas does not explicitly opt for or against the unicity of celestial matter. See RODOLFI: "La dottrina della materia celeste ...", pp. 32, 35.

⁷⁵ Cf. THOMAS AQUINAS: *Summa Theologiae*, I, q. 66, a. 2, sol (ed. Leon., t. 5, p. 157a): "Nec hoc excluditur, si una illarum formarum sit perfectior et continens in se virtute alias [...]. Sic ergo materia, secundum quod est sub forma incorruptibilis corporis, erit adhuc in potentia ad formam corruptibilis corporis. Et cum non habeat eam in actu, erit simul sub forma et privatione: quia carentia formae in eo quod est in potentia ad formam, est privatio. Haec autem dispositio est corruptibilis corporis. Impossibile ergo est quod corporis corruptibilis et incorruptibilis per naturam, sit una materia".

⁷⁶ In his answer to the fifth objection, Aquinas seems willing to go even further. In fact, he tentatively compares —by reference to Averroes— celestial matter to sublunary *substrates*, instead of to sublunary *matter*. As it is well known, Aquinas no longer entertains such a comparison in his later works. See LITT: *Les corps célestes ...*, p. 90. It seems to me that the main interest of this development is exegetical rather than philosophical. To put it differently, Aquinas' doubts do not concern his fundamental philosophical options —particularly his commitment

(β) Second, Aquinas focuses on another problematic implication of the objection just rejected. If celestial and sublunary bodies can be reduced to one and the same prime matter, then any corruptible compound is potentially incorruptible, since its substrate would be in potency with respect to any celestial form not inhering in it; and vice versa, celestial bodies would be potentially corruptible, their material substrate being in potency with respect to any sublunary form too, which contradicts the idea that there is no contrariety among celestial forms. Therefore, the possibility of reducing celestial and sublunary matter to one and the same prime matter must be excluded⁷⁷.

Aquinas concludes by discussing another objection to his thesis⁷⁸: celestial and sublunary matter are the same as far as their bare foundation is concerned, that is, once all their determinations are stripped away, but differ from each other if the types of movement they can undergo are taken into consideration. Aquinas unconditionally rejects such an option. It is worth noting here that his target could very well be Albert the Great⁷⁹. In Aquinas' view, in fact, since any actuality is determined by its respective potency (rather than the other way round), diversity of movement does not cause, but rather is caused by diversity of matter.

To sum up, in answering the question about the nature of celestial prime matter, Aquinas follows the Commentator, whose option seems

to the hylomorphic composition of all bodies, including celestial ones—, but rather the way in which Averroes' doctrine of celestial matter—as emerging from his *De substantia orbis*— should actually be read. From a doctrinal point of view, it is likely consistent to think that, even according to the early Aquinas, celestial prime matter is in potency properly speaking neither with respect to substantial, nor to local change, but only with respect to celestial substantial form. For a different interpretation see BALDNER: "Thomas Aquinas...", p. 446, 449-451. Concerning Averroes on the immateriality of celestial bodies, see Matteo Di Giovanni: "Averroes on the Species of Celestial Bodies", in *Wissen über Grenzen. Arabisches Wissen und lateinisches Mittelalter*, eds. Andreas Speer, Lydia Wegener, Berlin/New York: Walter de Gruyter 2006 (Miscellanea Mediaevalia, 33), pp. 438-464: 440-443; Silvia Donati: "La dottrina di Egidio Romano sulla materia dei corpi celesti. Discussioni sulla natura dei corpi celesti alla fine del tredicesimo secolo", *Medioevo*, XII (1986), pp. 229-280: 230-235.

⁷⁷ On this argument, see BALDNER: "Thomas Aquinas ...", p. 447.

⁷⁸ Cf. *ibid.*, p. 449.

⁷⁹ Albert the Great: *In II Sent.*, d. 3, a. 4. On this passage see RODOLFI: *Il concetto ...*, p. 68.

more reliable than Avicenna's, ultimately for exegetical reasons (as we have seen in d. 3). Averroes' reading of Aristotle and, in particular, the way in which he solves the apparent contradictions⁸⁰ of the Philosopher's doctrine of matter is the most satisfying. Once again, in this text of his commentary on *Sentences*, Aquinas substantiates the doctrine of *De principiis* and extends its scope so as to include an accounting for heavenly matter. Therefore, it is on the metaphysical notion of matter that he focuses here, where his interest lies in the ontological structure of bodies, rather than in their physical capacity for movement.

2.2.3 Further along in his commentary on d. 12, Aquinas discusses different readings of Genesis' opening. While showing a keen preference for Augustine's interpretation —wherein the Hexaëmeron describes successively what actually happened instantly—, Aquinas examines and substantiates Gregory the Great's reading⁸¹ - wherein God's work of creation was actually six days long, as different beings were created in different moments, starting from formless matter in which everything was indistinctly contained. While in a. 3 Aquinas delves into the Augustinian interpretation, in a. 4-5 he takes up Gregory's, specifically considering its philosophical implications. In what follows, our focus will be on a. 4.

⁸⁰ Cf. *SSLS* II, d. 12, q. 1, a. 1, ad 4 (p. 304): "Philosophus in libris *Physic.* nondum probaverat esse quintam essentiam, quod in principio *Caeli et mundi* demonstrat; et ideo in libris *Phys.* nihil determinat de his quae sunt propria illi essentiae, propter quod etiam tractatum *De infinito*, ut Commentator dicit in *I Caeli et mundi*, reiterat".

⁸¹ On the reasons of such a choice, which is made several times in the following distinctions, see *ibid.* a. 2, sol (p. 305-306): "[...] quae ad fidem pertinent, dupliciter distinguuntur. Quaedam enim sunt per se substantia fidei, ut Deum esse trinum et unum [...], in quibus nulli licet aliter opinari [...]. Quaedam vero per accidens tantum, in quantum scilicet in Scriptura traduntur, quam fides supponit Spiritu sancto dictante promulgatam esse: quae quidem ignorari sine periculo possunt ab his qui Scripturas scire non tenentur, sicut multa historialia: et in his etiam sancti diversa senserunt Scripturam divinam diversimode exponentes. Sic ergo circa mundi principium aliquid est quod ad substantiam fidei pertinet, scilicet mundum incepisse creatum, et hoc omnes sancti concorditer dicunt. Quo autem modo et ordine factus sit, non pertinet ad fidem nisi per accidens, in quantum in Scriptura traditur, cuius veritatem diversa expositione sancti salvantes, diversa tradiderunt".

Here the question Aquinas raises concerns the ontological status of primordial formless and empty matter⁸²: can it possibly have been formally indeterminate and, at the same time, self-subsisting? In fact, if God created matter before any other being, in the beginning, He must have made it to exist *qua* matter (a first requirement) and, moreover, to be further determinable (a second requirement). Aquinas tries then to characterize primordial matter, i.e., to single out what could constitute a formless and empty earth.

He suggests two possibilities. (1) The first is bare prime matter, the most basic substrate of any natural body, to which any corporeal being can ultimately be reduced. Aquinas rules this out by examining the distinctive features of prime matter⁸³. Explicitly grounded on Aristotle⁸⁴ and Avicenna⁸⁵, his description is completely consistent with the one sketched in *De principiis*, shared also by his contemporaries. About prime matter he makes the following observations. First, it has absolutely no form, otherwise it would not be prime: it would be a hylomorphic compound. Second, it can be known only analogically, that is, insofar as it relates to some knowable substantial form. Third, it cannot exist by itself, but only as the matter of some hylomorphic compound, thanks to some form inhering in it. While the first two features meet the determinability requirement, the third fails to meet the subsistence requirement. This is why, from Gregory's perspective, the formless earth of Genesis cannot be the prime matter of the philosophers. And yet, according to Augustine's reading, it can be prime matter. On his view, the distinction between primordial matter and the material substrate of hylomorphic (primordial) compounds is purely logical, so that the self-subsistence of the former is not required.

(2) The second possibility for primordial matter is only-relatively-formless matter. On this account, in the beginning God would have created prime matter under some very general form⁸⁶. Taking for

⁸² Aquinas' article also has an exegetical aim with respect to Peter LOMBARD: *Sentetiae...*, II, d. 12, p. 387.15-26.

⁸³ THOMAS AQUINAS: *SSLS* II, d. 12, q. 1, a. 4, sol.

⁸⁴ ARISTOTLE: *Physics*, A7, 191a 7-12.

⁸⁵ AVICENNA LATINUS: *Philosophia prima vol.1*, tr. II, 3-4; *Liber primus naturalium*, tr. I, p. 21.54-59.

⁸⁶ THOMAS AQUINAS: *SSLS* II, d. 12, q. 1, a. 4, sol (p. 313-314): "Alio modo dicitur materia prima secundum quod «primum» importat ordinem temporis:

granted the adequacy of this second possibility, Aquinas focuses on primordial matter's formal aspect, and this to determine how many forms were involved in it and what they were. To this end, he reviews several options. After having excluded two theses ascribed to ancient philosophers (by simply hinting at Aristotle's refutation of them)⁸⁷, Aquinas focuses on two modern versions of pluralism⁸⁸ and rejects both on the authority of Averroes and Avicenna. Finally, he proposes a third solution, ascribable to theologians, and embraces it⁸⁹.

(i) According to the partisans of the first modern option, prime matter was originally created under one single pre-elemental form, related to the elemental forms as something imperfect to its corresponding perfection, like the form of an embryo to that of a fully formed animal, as Aquinas puts it⁹⁰. Even if he does not trace this first option to anybody in particular, in view of the example he suggests, he likely intends to reconstruct a pluralist doctrine quite popular in the first half of the 13th century, also embraced by Bonaventure in his commentary on *Sentences*⁹¹. (ii) The second option Aquinas ascribes to Avicenna: matter

illud scilicet quod duratione praecessit ordinatam dispositionem partium mundi, qualis nunc cernitur, secundum eos qui ponunt mundum non semper fuisse, nec a principio creationis omnia distincta fore: et sic accipiendo primam materiam, oportuit eam habere aliquam formam”.

⁸⁷ *Ibid.*: “Sed circa hoc antiqui philosophi diversificati sunt. Quidam enim posuerunt eam esse totam sub una forma [...]. Alii vero posuerunt eam sub pluribus formis [...]. Et hoc tamen diversimode posuerunt [...]. Et hae omnes positiones a Philosopho sufficienter improbatæ sunt.”.

⁸⁸ *Ibid.* (p. 314): “Moderni etiam in has duas vias dividuntur. Quidam enim ponunt materiam illam primam totam sub una forma creatam.”.

⁸⁹ *Ibid.* (p. 315): “Et ideo, tenendo viam aliorum sanctorum, qui ponunt successionem in operibus sex dierum, videtur mihi dicendum quod prima materia fuit creata sub pluribus formis substantialibus, et quod omnes formæ substantiales partium essentialium mundi in principio creationis productæ sunt”.

⁹⁰ *Ibid.* (p. 314): “[...] Ne in antiquum errorem labi videantur, ponunt illam formam non esse unum quatuor elementorum, sed aliquid quod se habet in via ad ea, ut imperfectum ad perfectum; sicut forma embrionis se habet ad animal completum”.

⁹¹ BONAVENTURE: *Commentaria in quatuor libros Sententiarum*, II, d. 12, a. 1, q. 3, concl. (p. 300a-b). On XIIIth-century embryological doctrines, see BAZÁN: “La corporalité ...”, pp. 390-392.

was originally created under only one substantial form, viz. the form of corporeity; further determinations would have been added later, in order to allow the distinction of corporeal beings into genera and species⁹².

As we have said, Aquinas refutes both theses. In rejecting the first he focuses on the kind of primordial enmattered form suggested, leaving open for the moment the possibility of a pluralist solution. But in discussing the second he specifically criticizes the metaphysical pluralism the option entails. (i*) Against the *quidam* postulating the existence of some pre-elemental form, Aquinas formulates two replies: the first is an argument from authority, invoking both Averroes and Avicenna⁹³; the second is an empirical demonstration that the elemental form is actually the very first formal determination matter can receive, so that matter cannot derive but from such a form its simplest level of actuality⁹⁴. (ii*) Against Avicenna's opinion, Avicenna's authority is invoked⁹⁵. According to the latter —says Aquinas—, it is by virtue of

⁹² Thomas AQUINAS: *SSLS II*, d. 12, q. 1, a. 4, sol (p. 314): “Nisi forte dicatur, secundum positionem libri *Fontis vitae*, esse unam primam formam, et sic in materia primo inductam fore formam corporalem communem, et postmodum formas speciales distinctas”.

⁹³ *Ibid.*: “Sed hoc non potest similiter dici in elementis: quia, secundum Commentatorem, XI *Metaphysic.*, prima habitus, quae est in materia, est ad formam elementi. Unde non invenitur aliqua forma media inter materiam primam et formam elementi, sicut inveniuntur multa media inter materiam primam et formam animalis; quarum una alteri succedit, quousque ad ultimam perfectionem veniatur, intermediis multis generationibus et corruptionibus, ut Avicenna dicit. Et praeterea, cum tunc naturalia principia instituta fuerint, oporteret etiam nunc in naturali elementorum generatione advertere aliam formam ante formam elementi.”

⁹⁴ See AVERROES: *In Metaph. XI(I)*, c. 11, 297r bF.

⁹⁵ Thomas AQUINAS: *SSLS II*, d. 12, q. 1, a. 4, sol (p. 314-315): “Sed hanc positionem Avicenna improbat, quia omnis forma substantialis dat esse completum in genere substantiae. Quidquid autem advenit postquam res est in actu, est accidens: est enim in subjecto quod dicitur ens in se completum. Unde oporteret omnes alias formas naturales esse accidentia; et sic rediret antiquus error, quod generatio idem est quod alteratio. Unde ipse vult quod ab eadem forma per essentiam, ignis sit ignis et corpus et substantia”. Cf. AVICENNA LATINUS: *Philosophia prima*, vol. 1, tr. I, 2, *passim*; *Liber primus naturalium*, tr. I, pp. 93.49-94.59.

only one metaphysical principle that any *X* is made subsistent not only as a being per se, but also as a being of a certain kind (rather than of another). This principle, unique for any *X*, is its substantial form, which makes *X*, to all intents and purposes, a complete being. As a consequence, any further supervening determination will be accidental with respect to *X*. His commitment to these Avicennian presuppositions leads Aquinas to pinpoint the weak spot of Avicenna's metaphysics, specifically, by denying that such a principle could be the form of corporeity. If this were the case, any specific form would be merely accidental with respect to already full-formed substances (i.e., bodies), making them fall under accidental categories rather than natural genera and species. Moreover, within such a framework any generative process would be reducible to alteration, which is clearly not the case. Therefore, Aquinas cannot admit of corporeity as the very first form inhering in primordial matter. Although somehow apt to subsist, a so-called primordial matter could not fill the role of substrate for essentially different bodies: already endowed with a substantial form, they could not admit of any other. In other words, there would be no room for any specific distinction among creatures.

(iii) Having rejected both modern philosophical answers to the question, Aquinas proposes his own theological solution. On his view, from the beginning matter was provided with a plurality of formal determinations, which made it apt to originate individuals specifically distinct from one another. Still, primordial matter was relatively formless, insofar as its formal determinations were not yet provided with their respective active and passive qualities. In fact, God put them into matter from the second day onwards, and such an addition completed the previous day's work of creation, without affecting its substantial features.

In order to show the philosophical consistency of this theological solution, namely to prove that substantial forms can actually subsist separately from their respective qualities, Aquinas invokes once more the authority of Avicenna. Specifically, he refers to his theory of mixture, subscribing to it only tentatively here, by contrast with his approach in later works⁹⁶. According to Avicenna, once involved in mixture,

⁹⁶ Thomas AQUINAS: *SSLS* II, d. 12, q. 1, a. 4, sol (p. 315): "[...] si sustinere volumus opinionem Avicennae [...]". For an overview of Aquinas' doctrinal evolution concerning the ontological status of elements in mixture, see IDEM:

natural elements can never be affected or substantially changed as far as their primary perfections (viz. their essential features) are concerned, but they can lose their secondary perfections, since these latter can be affected and then replaced⁹⁷. Therefore, the subsistence of primary perfections does not depend on the actual presence of any specific secondary perfection. As Aquinas seems to imply, the elementary forms under which primordial matter was created related to their active and passive qualities in the same way as natural elements' primary perfections relate to their secondary perfections. Accordingly, there is nothing philosophically puzzling in the hypothesis of a partially shaped primordial matter, whose formal features were prior to and ontologically independent from their active and passive qualities.

To sum up, even if it is Gregory's reading of Genesis that is at issue in a. 4 of his commentary on d. 12, Aquinas' approach ends up being less exegetical one might expect. By separating the biblical notion of formless earth from the philosophical notion of prime matter, Aquinas manages not only to confirm the major points of his doctrine of matter, but also to further elaborate on some of them. On the Avicennian notion of corporeity in particular, which he manifestly does not take as implying any plurality of substantial forms, by contrast with Avicenna's *forma corporalis*. Moreover, by rejecting pluralism and claiming the ontological priority of elemental forms with respect to any further level of formal determination of matter, Aquinas implicitly refuses to give prime matter any active power whatsoever or any inclination towards form whatsoever, as he will say more clearly in d. 18. As before, in this context also the role of Arabic sources is crucial. In fact, Aquinas draws on Avicenna and Averroes more than once in order to answer the main

Quaestiones disputatae de anima, ed. B. Carlos Bazán, Rome-Paris: Commissio Leonina - Éditions du Cerf, 1996 (Opera omnia, t. 24.1), p. 78.80-82 *cum adn.*; *De mixtione elementorum ad magistrum Philippum de Castro Caeli*, ed. Hyacinthe F. Dondaine, Roma: Editori di San Tommaso 1976 (Opera omnia, t. 43), pp. 135-136. See also Steve BALDNER: "St. Albert the Great and St. Thomas Aquinas on the Presence of Elements in Compounds", *Sapientia*, LIV (1999), pp. 41-57; WIPPEL: *The Metaphysical Thought...*, pp. 348-351.

⁹⁷ Thomas AQUINAS: *SSLS* II, d. 12, q. 1, a. 4, sol (p. 315): "[...] elementa in mixto remanere secundum formas substantiales quantum ad primum esse, transmutari autem quantum ad secundum, scilicet quantum ad qualitates activas et passivas".

exegetical question. If Aquinas will substantially rethink —later in his career— his interpretation of some of the passages quoted here, his reading of some others is already clear-cut. This is the case, for example, of the Avicennian doctrine of corporeity, to which Aquinas confers no ontological value.

2.2.4 In SSLS II, d. 18, q. 1, Aquinas raises a twofold question about seminal reasons⁹⁸. If his ultimate concern is to maintain that God introduced them into primordial matter, Aquinas mainly focuses on the very notion of seminal reasons from an ontological perspective, in order to establish what the phrase concretely designates⁹⁹. The occasion for taking up the question is provided by the text he is commenting on, where the Lombard resorts to two Augustinian expressions¹⁰⁰ —*ratio seminalis* and *ratio primordialis*—, without going into details about their meaning and mutual relationship. As announced in the *divisio textus*¹⁰¹, Aquinas intends to remedy Peter's omission and to show that seminal and primordial virtues do not coincide with one another. This article's relevance to our discussion lies in the perspective within which Aquinas considers seminal reasons. His interest is mainly metaphysical, as he looks ultimately at the ontological structure of hylomorphic compounds.

Aquinas' solution is quite complex. Very roughly speaking, having stated that there really are seminal reasons in matter and what they are¹⁰², he aims at, so to say, situating them in extra-mental reality, specifically,

⁹⁸ On seminal reasons, see Marcia L. COLISH: *The Stoic Tradition from Antiquity to the Early Middle Ages*, Leiden: Brill 1990, vol. 2, pp. 203-207; Étienne GILSON: *Introduction à l'étude de Saint Augustin*, Paris: Vrin 1943, pp. 269-274; Pasquale MAZZARELLA: *Controversie medievali. Unità e pluralità delle forme*, Napoli: Giannini Editore 1978, pp. 233-245.

⁹⁹ Thomas AQUINAS: SSLS II, d. 18, q. 1, a. 1, arg. 1 (p. 450): "Videtur quod inconvenienter dicatur rationes seminales materiae Deus indidisse."

¹⁰⁰ See for instance AUGUSTINE: *De Genesi ad litteram*, IX, ch. 15-17, *passim*.

¹⁰¹ Thomas AQUINAS: SSLS II, d. 18, q. 1, *divisio textus* (p. 446): "Circa primum quaeruntur tria: primo utrum corpus mulieris de costa viri factum fuerit; et quia dicitur hoc non fuisse factum active per rationes seminales, sed primordiales, secundo quaeritur de differentia harum rationum [...]"

¹⁰² *Ibid.*, a. 2, sol (p. 451): "Ipsae autem virtutes in materia positaе, per quas naturales effectus consequuntur, rationes seminales dicuntur". According to Aquinas, seminal reasons are those principles that, once put into matter, enable natural forms to serve their purpose and ensure that from any natural cause

at integrating them within an Aristotelian metaphysical framework¹⁰³. The following discussion will provide only a partial account of Aquinas' solution, and will focus on the sections dealing specifically with the essence of seminal virtues¹⁰⁴. Before putting forward his own view — viz. that seminal reasons are in matter as active and passive virtues¹⁰⁵ —, Aquinas reconstructs the contemporary debate in which he takes part. The theses from which he intends to distance himself are two, actually not incompatible with one another. In both, seminal reasons are connected to the hylomorphic structure of created beings. Let us briefly review them.

(1) According to the first opinion¹⁰⁶, the seminal reason of any X is X's generic form, numerically distinct from and presupposed to the acquisition of X's specific form. By virtue of its seminal reason, X is provided with a natural inclination towards its specific form it could not have had otherwise. Both generic and specific forms enter into X's

descend, regularly and with no need of any further direct divine intervention into nature, its respective natural effects.

¹⁰³ *Ibid.*: “[...] quid sint secundum rem seminales rationes”.

¹⁰⁴ Aquinas' solution is studied more extensively by BAZÁN: “La corporalité ...”, p. 397; cf. also Marta BORGO: “Les raisons séminales entre théologie et philosophie: d'Alexandre de Halès à Thomas d'Aquin”, *Documenti e studi sulla tradizione filosofica medievale*, XXIII (2012), pp. 143-171; Aimé FOREST: *La structure métaphysique du concret selon saint Thomas d'Aquin*, Paris: Vrin 1956, p. 233; WIPPEL: *The Metaphysical Thought ...*, p. 336.

¹⁰⁵ Thomas AQUINAS: *SCLS II*, d. 18, q. 1, a. 2, sol (p. 453): “Rationes seminales dicuntur virtutes activae completae in natura cum propriis passivis, ut calor et frigus, et forma ignis, et virtus solis, et hujusmodi”; *ibid.*, ad 4 (p. 454): “Sub rationibus seminalibus comprehenduntur tam virtutes activae quam etiam passivae, quae perfici possunt per agentia naturalia; sicut et in generatione animalis semen extento nomine dicitur non solum sperma, sed etiam menstruum”.

¹⁰⁶ *Ibid.*, sol (p. 451-452): “Quidam enim dicunt quod forma speciei non recipitur in materia nisi mediante forma generis; adeo quod est alia forma numero per quam ignis est ignis, et per quam ignis est corpus. Illa ergo forma generalis incompleta ratio seminalis dicitur: quia propter talem formam inest materiae quaedam inclinatio ad recipiendum formas específicas”.

essence, insofar as both are substantial. This is, for instance, Richard Rufus of Cornwall's opinion¹⁰⁷ and later, also Roger Bacon's¹⁰⁸.

(2) According to the second opinion¹⁰⁹, the seminal reason of any X is some inchoate, incomplete form inherent in X's matter: such a form exists prior to X (taken as an actual compound), but has not yet been given its complete *virtus agendi*, so that in order for it to emerge from matter and arrive at its own perfection, the intervention of an external agent is required. In fact, since any form must be educed from the potency of matter, if X's form were not already somehow present in X's matter, the generation of X would consist in a violent, unnatural motion —which cannot be the case. This thesis is defended not only by Albert the Great, but also by Robert Grosseteste, Robert Kilwardby and Roger Bacon¹¹⁰.

To summarize, the advocates of both theses agree not only on the formal role of seminal reasons, but also on their ontological incompleteness with respect to specific substantial form. Moreover, they agree on admitting some active potency these incomplete forms impart to matter, namely about drawing a distinction between the metaphysical notion of 'prime matter' and the physical notion of 'formed matter', viz. of the substrate of change. Aquinas acknowledges that seminal reasons are somewhat tied to substantial forms, but he is unwilling to accept the further assertions of his predecessors and contemporaries. Indeed, he calls their metaphysical assumptions into question, especially their conception of hylomorphism. While in rejecting the first option Aquinas focuses mainly on the notion of substantial form, in refuting the second

¹⁰⁷ For a different interpretation, see Elizabeth KARGER: "Richard Rufus's Account...", p. 187.

¹⁰⁸ For further details, see BORGIO: "Les raisons ...", pp. 146-148.

¹⁰⁹ Thomas AQUINAS: *SSLS* II, d. 18, q. 1, a. 2, sol (p. 452): "[...] Alii dicunt quod cum omnes formae, secundum Philosophum [...], de potentia materiae educantur, oportet ipsas formas praexistere in materia incomplete, secundum quamdam quasi inchoationem; et quia non sunt in esse suo perfectae, non habent perfectam virtutem agendi, sed incompletam; et ideo non possunt per se exire in actum, nisi sit agens exterius quod excitet formam incompletam ad agendum, ut sic cooperetur agenti exteriori; aliter enim non esset generatio mutatio naturalis, sed violenta [...]. Has ergo virtutes incompletas in materia praexistentes rationes seminales dicunt, quia sunt secundum esse incompletum in materia, sicut virtus formativa in semine".

¹¹⁰ On this thesis, see BORGIO: "Les raisons ...", pp. 150-151.

he calls specific attention to the concept of matter. His discourse has three particular targets: in addition to the notion of 'formed matter', the theories of the plurality of substantial forms and of the active potency of matter. The latter two were major 13th-century philosophical doctrines originating in the study of Aristotle's texts.

Particularly relevant to the present discussion are the first three arguments Aquinas provides against the first thesis¹¹¹. The opening argument aims at the kernel of pluralism. As in his earlier discussion of the form of corporeity, Aquinas claims that there cannot be many substantial forms inhering in one single being, since any form supervening after the first would be accidental. As a consequence, if the seminal reason of any hylomorphic compound were its generic substantial form, there would be no place for any other specific determination, since the seminal reason would make the compound a complete and subsisting being (and any further substantial determination would be accidental). This brings us to Aquinas' second argument: since any substantial form provides any compound its substantial being, every compound would admit of two substantial beings, which is impossible. It is worth noting that, once again, Aquinas grounds his claim for the unicity of substantial form on the authority of Avicenna¹¹², according to whom any corporeal substance is both the substance and the body it actually is by virtue of one single substantial form.

Avicenna's authority continues to play a major role in the third argument against the pluralists. Aquinas explains a passage from

¹¹¹ Thomas AQUINAS: *SSLS* II, d. 18, q. 1, a. 2 (p. 452): "Hoc autem non videtur esse verum: quia omnis forma quae advenit post aliquod esse substantiale est forma accidentalis [...]. Et praeterea, cum omnis forma det aliquod esse, et impossibile sit unam rem habere duplex esse substantiale, oportet, si prima forma substantialis adveniens materiae det sibi esse substantiale, quod secunda superveniens det esse accidentale: et ideo non est alia forma qua ignis est ignis, et qua est corpus, ut Avicenna vult... Et si Commentator dicat in *II Metaph.* [...] genus non esse materiam, sed formam mediam inter materiam et ultimam formam; hoc non dicitur ad significandum ordinem formarum secundum rem, sed secundum rationem: quia genus quamvis significet totum, ut Avicenna dicit, significat tamen ut indistinctum, et ita propinque se habet ad rationem materiae". On these arguments, see BORGIO: "Les raisons séminales ...", pp. 148-149, 163.

¹¹² See above, p. 64.

Averroes¹¹³ —where the Commentator seems to claim that genus does not coincide with matter, but with some intermediate form between matter and the specific form— by referring to Avicenna¹¹⁴. Aquinas suggests a logical reading of Averroes' statement, with no ontological implications. To put it differently, Aquinas takes not only Avicenna, but also Averroes as a non-pluralist. It is worth noting here that Aquinas' interpretative point is not unwarranted, as the passage quoted from Averroes was controversial at the time¹¹⁵.

Against the identification of seminal virtues with inchoate forms Aquinas formulates two arguments, both specifically aimed at one of its presuppositions: the presence of some active principle in matter as a necessary condition for it to undergo change¹¹⁶. In his view, if matter were endowed with inchoate forms, it would be able to activate its passive potency by itself —which cannot be the case, given that no inanimate being can be a *per se* moving cause of alteration. After all, in natural generation matter is not supposed to function as an agent, but simply to provide the capacity for receiving the forms external agents

¹¹³ AVERROES: *In I Metaph.* c. 17, 14v bK-L. Concerning the passage in the original Arabic, see Matteo DI GIOVANNI: "Substantial Form in Averroes' Long Commentary on the *Metaphysics*", in *In the Age of Averroes: Arabic Philosophy in the Sixth/Twelfth Century*, ed. Peter Adamson, London/Torino: The Warburg Institute /Nino Aragno Editore 2011, pp. 175-194: 182-185, 192-194. On the reception of this passage in the Latin tradition, see FOREST: *La structure ...*, pp. 183-188; Graham J. McALEER: "Augustinian Interpretations of Averroes with Respect to the Status of Prime Matter", *The Modern Schoolman*, LXXIII.2 (1996), pp. 159-172.

¹¹⁴ Avicenna provides philosophical reasons for comparing genus to matter and, consequently, for drawing a merely conceptual distinction between genus and species. As Avicenna would have it, genus and species both designate wholes, but in different senses: while genus describes a given whole indistinctly, such is not the case with species: cf. *Philosophia prima*, vol.2, tr. V, 3.6.

¹¹⁵ See BORGO: "Les raisons séminales ...", pp. 164-170.

¹¹⁶ Thomas AQUINAS: *SSLS* II, d. 18, q. 1, a. 2 (p. 452-453): "Hoc autem verum non videtur: quia quamvis formae educantur de potentia materiae, illa tamen potentia materiae non est activa, sed passiva tantum; sicut enim ut Commentator dicit in VIII *Physic.*, in motu locali oportet esse aliud movens et motum, ita etiam in motu alterationis [...]. Nec tamen sequitur, si in materia est potentia passiva tantum, quod non sit generatio naturalis: quia materia coadjuvat ad generationem non agendo, sed in quantum est habilis ad recipiendum talem actionem".

can educe from it. Matter is not required then to be endowed with any active potency.

To sum up, according to Aquinas the phrase “seminal reasons” can designate neither generic nor inchoate forms. In fact, there exist neither generic substantial forms really distinct from specific ones, nor inchoate forms, since matter is devoid of any active potency and substantial forms can exist in it only completely. Therefore, seminal reasons have nothing to do either with the matter *qua* matter or with physical matter. On the contrary, they inhere in matter along with enmattered substantial form and are not ontologically prior to them¹¹⁷. All of this is perfectly consistent with what emerges from the previously examined texts. However, something new appears here, namely, the contemporary philosophical debate within which early Aquinas’ doctrine of matter must be contextualized, in all its complexity and its liveliness.

3. CONCLUDING REMARKS

From his commentaries on distinctions 3, 12 and 18 of Book II of the *Sentences*, it appears clearly that Aquinas’ approach to Peter Lombard’s text is quite different from those of previous theologians. Even more than Albert the Great, concerning the ontological status of matter Aquinas feels the need to take seriously the philosophical implications of a few of Peter’s claims, and to meet the philosophers on their own ground. His contribution to the contemporary debate is valuable and original. Indeed, Aquinas does not draw uncritically from the mainstream of the Arts Faculty: he is neither a pluralist nor a supporter of universal hylomorphism; moreover, he coherently endorses the thesis of matter’s passive potentiality by refusing to distinguish between physical and metaphysical notions of matter, and by refusing to attribute to matter any active power.

In addition to Aristotle, both Avicenna and Averroes play major roles in the formation of Aquinas’ thought on matter. He depends exclusively on neither. Though he explicitly opts for the views of Averroes more often than for those of Avicenna, this is not enough to allow us to label his Aristotelian doctrine of matter as mainly Averroian. In fact, Avicenna provides him with powerful philosophical instruments he often applies even when rejecting Avicenna’s opinion on a given topic. Moreover, the

¹¹⁷ *Ibid.*, ad 2.

texts analyzed above make it clear that, when he must choose between Avicenna and Averroes, Aquinas mainly applies an exegetical criterion to evaluate their positions: he judges them on the degree of their adherence to Aristotle's thought and texts. In other words, it is often Aristotle who provides the yardstick for measuring Averroes and Avicenna whenever their views come into conflict. To some extent, then, he considers both complements to Aristotle. Both are almost instrumental to his early comprehension of Aristotle's *Physics* and *Metaphysics*.

Aquinas often shows himself quite hesitant with respect to the texts of both Avicenna and Averroes: his interpretations of some of them are indeed far from definitive. His assimilation of Averroes in particular seems not yet finalized. Even here we see the possibility that Aquinas will better understand the Commentator's views, by taking his works less as exegetical instruments than as philosophical writings. This is the case, for instance, with Averroes account of celestial matter: Aquinas will change his mind with respect to his early reading in d. 12, showing that he would come only later to a complete appraisal of its philosophical implications. It is worth noting, however, that this interpretative fluidity with respect to Averroes' commentaries concerns not only Aquinas as an individual reader, but more generally his predecessors and contemporaries, as shown by his remarks against a pluralist reading of Averroes in d. 18.

Aquinas' position in the contemporary debate on matter is, on the contrary, firmer. His important positions are already clear, the cornerstones of his doctrine already fixed. Aquinas mentions no one openly, yet it is clear that he is perfectly aware of the current debate and wants to situate his ideas in its broad context.

On the whole, what is absolutely remarkable is Aquinas's ability to give voice to both ancient and contemporary interlocutors, and to use the former in order to reject the latter's arguments. Since all this occurs in his commentary on the *Sentences*, the result is even more surprising: all the literary genres mentioned above come to some extent to a synthesis. His commentary on Lombard is an occasion not only for explaining Genesis and for closely examining Augustine's reading of it; it also offers him the opportunity to raise further exegetical questions concerning Aristotle, and to elaborate on his doctrine of matter by involving Avicenna, Averroes, and a few contemporary philosophers. It is tempting to compare Aquinas' text to a series of Russian dolls. But

even this similitude fails to convey adequately the perfect integration of all the various strata within¹¹⁸.

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¹¹⁸ I would like to warmly thank Timothy Bellamah, Gabriele Galluzzo, two anonymous referees, as well as the participants to the colloquium *Aquinas and the Arabs* (Mexico City, 13th-15th October 2011) for their helpful remarks on previous versions of this paper. All remaining mistakes are my own.

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